

MODEL G0739 OSCILLATING SPINDLE SANDER

OWNER'S MANUAL

(For models manufactured since 2/12)



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This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

INTRODUCTION	2 2
Safety Instructions for Machinery	
Availability	
Needed for Setup	10 11 11 12 13 13 14 14

Disabling Switch Sanding Drum/Sleeve Installation Sanding	16 17
SECTION 5: ACCESSORIES	18
SECTION 6: MAINTENANCE	
Before Each Use After Each Use Monthly Maintenance	19
Cleaning	19
Troubleshooting	20
SECTION 8: WIRING	22
SECTION 9: PARTS Main Breakdown Labels Breakdown	24
WARRANTY & RETURNS	29

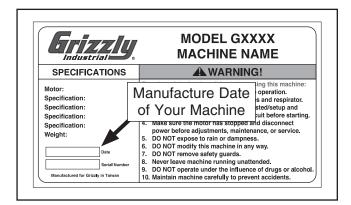
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, your machine may not exactly match the manual. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager P.O. Box 2069 Bellingham, WA 98227-2069 Email: manuals@grizzly.com



Identification

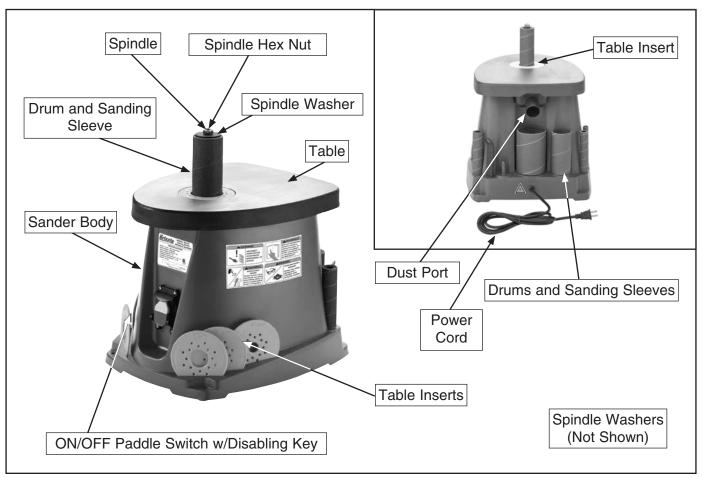


Figure 1. Machine identification.

AWARNING

For Your Own Safety Read This Manual Before Operating Spindle Sander

- a) Wear eye protection.
- b) Support workpiece on worktable.
- c) Minimize pinch hazards. Use the smallest table insert possible with sanding drum.
- d) Avoid kickback. Feed workpiece against rotation of drum.
- e) Avoid entanglement with spinning drum. Do not wear gloves, necktie, or loose clothing. Tie back long hair.



MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0739 OSCILLATING SPINDLE SANDER

Product Dimensions:	
Weight	30 lbs
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	
Shipping Dimensions:	
Type	Cardboard
Content	
Weight	
Length x Width x Height	18 in. x 16 in. x 20 in
Electrical:	
Power Requirement	
Minimum Circuit Size	
Switch	Paddle ON/OFF Switch w/Disabling Key
Switch Voltage	
Cord Length	
Cord Gauge	
Plug Included	
Included Plug Type	1-15
Motors:	
Main	
Type	Permanent Magnet Moto
Horsepower	1/2 HF
Voltage	
Phase	Single-Phase
Amps	3.5 <i>A</i>
Number of Speeds	
Power Transfer	V-Bel
Bearings	Sealed and Lubricated for Life
Main Specifications:	
Table Info	
Table Width	11-1/2 in
Table Length	15 in
Table Thickness	
Table Opening	4 in
Spindle Info	
Spindle Diameter	1/2 in
Spindle Lengths	
Spindle Speed	2,000 RPN
Spindle Oscillation	58 OPN
Stroke Length	5/8 in
Drum Info	
Sanding Drum Diameters	
Sanding Drum Length	



SECTION 1: SAFETY

AWARNING

For Your Own Safety, Read Instruction **Manual Before Operating this Machine**

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, Indicates an imminently nazardous side WILL result in death or serious injury.

AWARNING Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

ACAUTION Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

AWARNING Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observiing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



AWARNING

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in dark areas. Keep work area clean, dry, and well-lighted.

ONLY USE AS INTENDED. Only use machine for its intended purpose. Never modify machine for a purpose not intended by the manufacturer!

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

STABLE MACHINE. Unexpected movement during operations greatly increases risk of injury or loss of control. Before starting, verify machines are stable and mobile base (if used) is locked.

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine *OFF* and ensure all moving parts completely stop before walking away.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine increases risk of injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, misadjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



AWARNING Additional Safety for Spindle Sanders

FEED RATE. Never jam a workpiece against the sanding surface. This can cause the workpiece to kick back or damage the machine. Firmly hold the workpiece and ease it against the spindle using light pressure.

AVOIDING ENTANGLEMENT. Keep loose clothing articles such as sleeves, belts or jewelry items away from the spindle. These items could get entangled in the spindle, resulting in serious personal injury. Never wear gloves when operating the spindle sander.

HAND PLACEMENT. Do not place hands near, or in contact with, sanding surfaces during operation to avoid personal injury.

WORKPIECE HANDLING. Hold the workpiece with both hands to maintain control while sanding (or use an appropriate holding jig) to reduce the likelihood of losing control of the workpiece and having it thrown from the machine.

SANDING SLEEVES. Worn or damaged sanding sleeves can tear apart and become entangled in the spindle or be thrown from the machine, resulting in personal injury or property damage. Replace sanding sleeves as required.

FOREIGN MATERIAL. Always inspect stock for nails, staples, knots, and other imperfections that could be dislodged and thrown from the machine during sanding operations.

DUST COLLECTION. Never operate the sander without an adequate dust collection system in place and running. Proper dust collection reduces dust in the work area, which decreases the risk of long-term respiratory damage.

DIRECTION. Never sand tapered or pointed stock with the point facing the feed direction to avoid the workpiece being thrown from the machine.

POWER DISCONNECT. Disconnect the machine from the power source before changing the sanding sleeve to avoid injuries in the event of an accidental startup.

RESPIRATOR USE. Always use a respirator that is approved for wood dust when using this machine to reduce the risk of short and long term respiratory illness. A dust collector is not an adequate substitute.

TABLE INSERTS. Always use the table insert that fits closest to the diameter of the installed sanding drum. A pinch hazard exists from the gap between the table and the oscillating drum. Keeping this gap as small as possible reduces the risk of this hazard.

AWARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

ACAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards.



AWARNING

Electrocution, fire, or equipment damage may occur if machine is not correctly grounded and connected to the power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 120V 3.5 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

Circuit Requirements

This machine is prewired to operate on a 120V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage	120V
Cycle	
Phase	Single-Phase
Power Supply Circuit	15 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

ACAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure that the circuit is properly sized for safe operation.



Polarized Plug

To reduce the risk of electric shock, this machine has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, turn it 180 degrees and try again. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

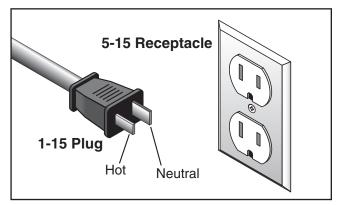


Figure 2. Typical 1-15 plug and receptacle.

AWARNING

Serious injury could occur if you connect the machine to power before completing the setup process. DO NOT connect to power until instructed later in this manual.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size16 AWG Maximum Length (Shorter is Better)......50 ft.



SECTION 3: SETUP



AWARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



AWARNING

Wear safety glasses during the entire setup process!

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Des	scription	Qty
•	Safety Glasses	1
•	Cleaner/Degreaser	
•	Disposable Shop Rags	As Needed
•	Straightedge 4'	1
•	Screwdriver Phillips #2	
•	Screwdriver Flat Head #2	1
•	Dust Collection System	1
•	Dust Hose 1½"	1
•	Hose Clamps 1½"	2

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, please call us immediately at (570) 546-9663 for advice.

Save the containers and all packing materials for possible inspection by the carrier or its agent. Otherwise, filing a freight claim can be difficult.

When you are completely satisfied with the condition of your shipment, inventory the contents.



AWARNING

SUFFOCATION HAZARD! Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.



Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Inv	entory: (Figure 3)	Qty
Α.	Spindle Sander Assembly	1
B.	Table Inserts ½", ¾", 1", 1½", 2", 3"	6
C.	Arbor Wrench	1
D.	Spindle Hex Nut	1
E.	Spindle Washers 5/8", 7/8", 13/4"	3
F.	Sanding Drums 3/4", 1", 11/2", 2", 3"	5
G.	Sanding Sleeves 1/2", 3/4", 1", 11/2", 2", 3"	6
	Raco Wacher 23/"	- 1

NOTICE

If you cannot find an item on this list, carefully check the machine and the packaging materials. Some of these items may be preinstalled for shipping or become misplaced during unpacking.

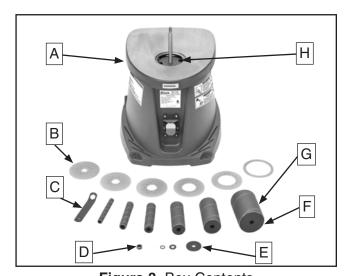


Figure 3. Box Contents

Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

- 1. Put on safety glasses.
- Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
- Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
- 4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

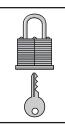
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. See below for required space allocation.



ACAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

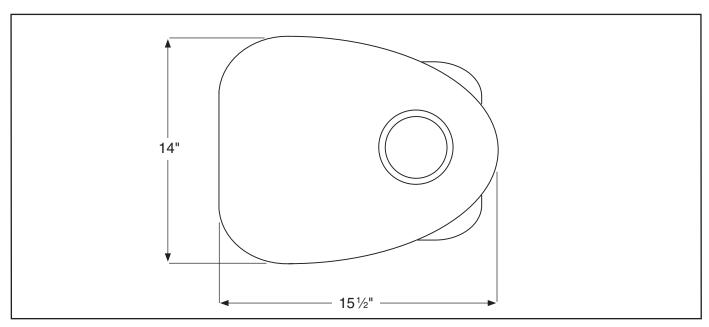


Figure 4. Model G0739 working clearances.



Mounting

The base of this machine has mounting holes that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage.

The strongest mounting option is a "Through Mount" (see example below) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.

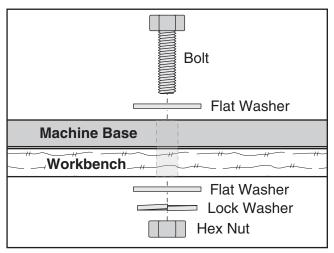


Figure 5. Example of a "Through Mount" setup.

Another option is a "Direct Mount" (see example below) where the machine is secured directly to the workbench with lag screws and washers.

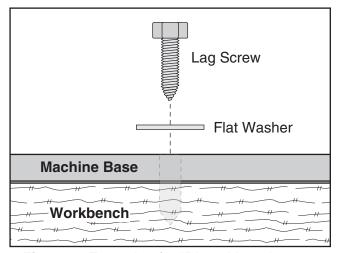


Figure 6. Example of a "Direct Mount" setup.

Assembly

Place the spindle hex nut, table inserts, sanding drums and sleeves, and spindle washers in the appropriate sized accessory slots beneath the table. A sanding drum does not need to be installed until after the test run.

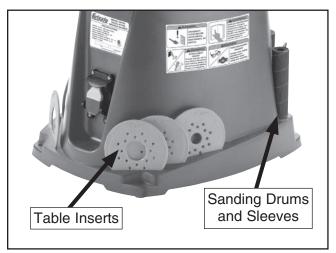


Figure 7. Assembled sander.

Dust Collection

ACAUTION

DO NOT operate the Model G0739 without an adequate dust collection system. This sander creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 100 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose:

- 1. Fit a 1½" dust hose over the dust port shown in **Figure 8** and secure in place with a hose clamp.
- Tug the hose to ensure it does not come off. A tight fit is necessary for proper performance.

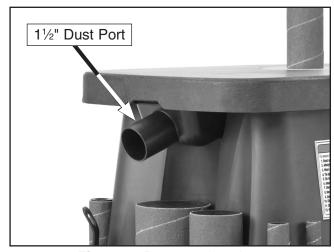


Figure 8. Dust port location.

Power Connection

After you have completed all previous setup instructions and circuit requirements, the machine is ready to be connected to the power supply.

To avoid unexpected startups or property damage, use the following steps whenever connecting or disconnecting the machine.

Connecting Power

- 1. Turn the machine power switch OFF.
- Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

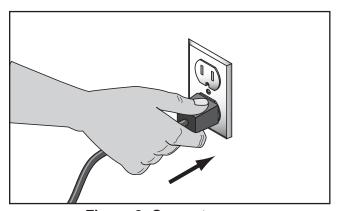


Figure 9. Connect power.

Disconnecting Power

- 1. Turn the machine power switch OFF.
- **2.** Grasp the molded plug and pull it completely out of the receptacle. Do not pull by the cord as this may damage the wires inside.

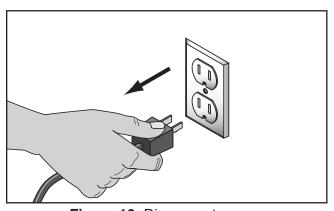


Figure 10. Disconnect power.



Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

Note: You do not need to install a drum to perform the test run.

The test run consists of verifying the following:

1) The motor powers up and runs correctly, and

2) The safety disabling mechanism on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 22**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

To test run the machine:

- Make sure you have read the safety instructions at the beginning of the manual and that the machine is assembled properly.
- **2.** Make sure all tools and objects used during setup are cleared away from the machine.
- **3.** Connect the machine to the power source.
- **4.** Verify that the machine is operating correctly by turning it *ON*.
 - —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
 - —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
- 5. Turn the machine *OFF*.

6. Remove the switch disabling key, as shown in **Figure 11**.

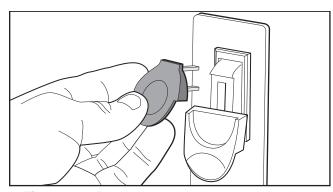


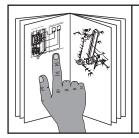
Figure 11. Disabling switch by removing key.

- **7.** Try to start the machine with the paddle switch.
 - —If the machine *does not* start, the switch disabling feature is working as designed.
 - —If the machine does start, immediately disconnect power. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Congratulations! The test run is complete. The sander is ready for operation.



SECTION 4: OPERATIONS



AWARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before operating.

AWARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear safety glasses and a respirator when operating this machine.





NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Disabling Switch

The switch can be disabled by removing the key, as shown in the following figure. Disabling the switch in this manner can prevent unauthorized operation of the machine, which is important if it is not kept inside an access-restricted building or in a location where children may be present.

IMPORTANT: Disabling the switch only restricts its function. It is not a substitute for disconnecting the machine from power when adjusting or servicing.

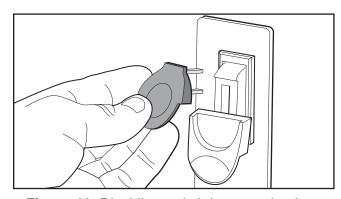


Figure 12. Disabling switch by removing key.

AWARNING

Children or untrained people can be seriously injured by this machine. This risk increases with unsupervised operation. To help prevent unsupervised operation, always disable switch before leaving machine unattended. Make sure to place key in a well-hidden or secure location!



Sanding Drum/ Sleeve Installation

To ensure the workpiece is supported during sanding operations, use the table insert that matches the corresponding drum and sleeve (see table below). It is important to keep the gap between the table insert and drum as small as possible to reduce the risk of a pinch hazard.

Sanding Sleeves	Sanding Drums	Table Inserts	Spindle Washers
1/2"	N/A	1/2"	5/8"
3/4"	3/4"	3/4"	7/8"
1"	1"	1"	7/8"
1 ½"	1 ½"	1 ½"	1 ¾"
2"	2"	2"	1 3⁄4"
3"	3"	3"	1 ¾"

To install or replace a sanding drum/sleeve:

- 1. DISCONNECT SANDER FROM POWER.
- While holding the sanding drum and sleeve, use the arbor wrench to loosen and remove the spindle hex nut.
- Remove the spindle washer, sanding sleeve, sanding drum, table insert and base washer (see Figure 13).

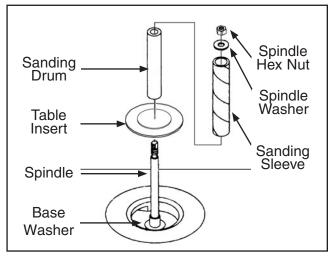


Figure 13. Removal/installation order of sanding drum components and table inserts.

- 4. Clean the table opening for the table insert and any other spindle areas as necessary. There should be no sawdust on the ledge of the table opening where the table insert is placed or the table insert will not sit flush with the table.
- **5.** Use the table on this page to select the required size of components for the sanding drum/sleeve size you have chosen.
- 6. Insert the base washer, then install the desired sanding drum on the spindle shaft, followed by the corresponding sanding sleeve on the drum, as shown in Figure 13.
- 7. Secure the sanding drum with the appropriate spindle washer and the spindle hex nut. Tighten until the rubber sanding drum places slight pressure on the sanding sleeve.

Sanding

To sand a workpiece:

- Turn the spindle sander ON and allow it to reach full speed.
- Using both hands to maintain control of the workpiece, guide the workpiece against the rotation of the spindle, as shown in Figure 14. DO NOT force the workpiece against the sanding sleeve. Allow the machine to do the work.

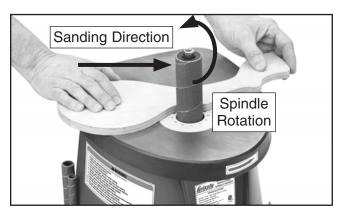


Figure 14. Sanding workpiece.



SECTION 5: ACCESSORIES

WARNING

Some aftermarket accessories can be installed on this machine that could cause it to function improperly, increasing the risk of serious personal injury. To minimize this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to the newest copy of the Grizzly Catalog for other accessories available for this machine.

Call 1-300-523-4777 To Order

PRO-STIK® Belt Cleaners

G1511—Large (1½" x 1½" x 8½")

G1512—Small (2" x 2" x 12")

H1446—13/8" x 41/4"

H1447—13/8" x 81/2"

These crepe-rubber Belt Cleaners quickly remove gum and grit from belts, sleeves and discs without damage. Extend the life of your belts, sleeves or discs with this innovative natural cleaner.



Figure 15. PRO-STIK® Belt Cleaners.

Replacement Sanding Sleeve 3 Packs

H5434—1/2" Dia. x 41/2", Hard A150

H5438—3/4" Dia. x 41/2", Hard A120

H5442—1" Dia. x 4½", Hard A100

H5447—11/2" Dia. x 41/2", Hard A100

H5451—2" Dia. x 41/2", Hard A80

H5455—3" Dia. x 4½", Hard A60

These aluminum oxide sanding sleeves come in a range of diameters and grits to meet all of your sanding needs.

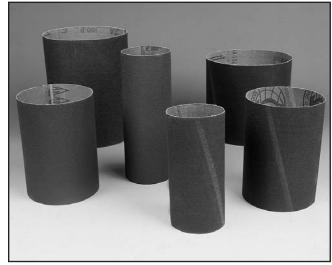


Figure 16. Replacement sanding sleeves.

H7828 Tool Table Plus - Complete

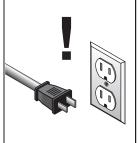
The Tool Table Plus was designed in response to customer requests for a slightly wider and taller table to accommodate small planers, wood lathes, sanders and a variety of other bench-top machines.



Figure 17. Tool Table Plus - Complete.



SECTION 6: MAINTENANCE



WARNING

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Before Each Use

- Inspect the sanding drums and sleeves for wear or damage.
- Check for worn or damaged wires.
- Check for any other unsafe condition that could hamper operation of this machine or cause potential injury.

After Each Use

- Turn the sander OFF.
- Clean up any sawdust or particle residue from the machine.
- Protect table.

Monthly Maintenance

 Clean/vacuum dust buildup from inside the sander body and off of the motor.

Cleaning

To clean your machine, vacuum excess wood chips and sawdust, and wipe off any remaining dust with a dry cloth. Sawdust and other particles can also work their way under the table insert, so this area also needs to be cleaned. Sanding sleeves can be cleaned with the PRO-STIK® cleaners on Page 20.

To clean the table:

- DISCONNECT SANDER FROM POWER.
- Remove sanding drum and table insert as described in Step 1 of the Sanding Drum Installation instructions on Page 18.
- Wipe or vacuum out any dust or particles that have accumulated beneath the table insert on the table opening, shown in Figure 18.
- **4.** Re-install table insert and sanding drum.

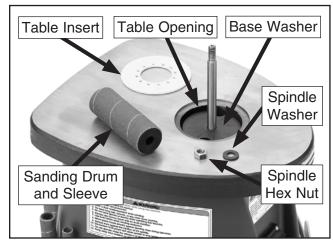


Figure 18. Table insert area.

5. To protect the table from rust, coat the table surface with a quality metal protectant.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting

Symptom	Possible Cause	Possible Solution
Motor will not start.	 Switch disabling key removed. Loose connections at motor or switch. 	 Insert key to enable switch. Inspect all motor connections for loose or open connections.
	3. Motor brushes worn.	3. Replace motor brushes as a set.
Motor will not start; fuses or circuit breakers	Short circuit in line cord or plug.	Inspect cord and plug for damaged insulation or shorted wires.
blow.	2. Loose connections at motor switch.	Inspect all motor connections for loose or shorted terminals or worn insulation.
	3. Switch, bridge rectifier or motor at fault.	Replace the component at fault.
Motor stalls (resulting in blown fuses or tripped circuit).	Motor overloaded.	Reduce feeding pressure.
Machine slows when operating.	Workpiece pressure is too great.	Secure machine to workbench.
Deep sanding grooves or scars in	Sanding sleeve too coarse for the desired finish.	Use a finer grit sanding sleeve.
workpiece.	2. Workpiece sanded across the grain.	2. Sand with the grain.
	Too much feeding pressure against workpiece.	3. Reduce pressure on workpiece while sanding.
Grains rub off the sanding sleeve.	Sanding sleeve has been stored in an incorrect environment.	Store sanding sleeve away from extremely dry or hot temperatures.
	Sanding sleeve has been folded or smashed.	Store sanding sleeves separately and not folded or flat.
Sanding surfaces clog quickly or burn.	Too much pressure against sleeve. Sanding softwood or wood with a high sap content.	 Reduce pressure on workpiece while sanding. Either use different wood or plan on cleaning/ replacing sleeves frequently.
Burn marks on workpiece.	Using too fine of sanding grit. Using too much pressure.	 Use a coarser grit sanding sleeve. Reduce pressure on workpiece while sanding.
	Work held still for too long.	3. Do not keep workpiece in one place for too long.



Changing Motor Brushes

This sander has a permanent magnet motor that uses carbon brushes for operation. These brushes normally wear out over time and eventually need to be replaced.

Symptoms that the brushes have worn beyond their usable life may include a loss of power, inconsistent operation of the motor (motor cuts in and out inexplicably), or an inability of the motor to start.

If you are having trouble with the performance of the motor, first refer to **Troubleshooting** on **Page 22** to determine if the motor brushes must be replaced.

A pair of new brushes can be purchased from Grizzly by requesting part #P0739033A. The replacement procedure can usually be done in about 15 minutes. When replacing the brushes, we recommend replacing them one at a time so you can keep track of which wire connects to each brush.

Please note: The brushes have a plug-type prongs (see Figure 19) that insert into the motor (similar to regular power plug). Take care when removing them to pull them out first instead of just up.

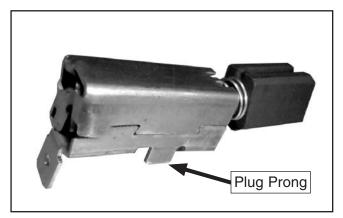


Figure 19. Motor brush assembly.

Tools Required:	Qty
Screwdriver Phillips	#21

To change motor brushes:

- 1. DISCONNECT SANDER FROM POWER.
- 2. Turn machine on its side, and remove the screws securing the base plate, then remove the base plate to allow access to the motor.
- Loosen the screws that secure the clamp plate over the brush assemblies (see Figure 20) but do not completely remove the plate.
- 4. Disconnect the wires attached to the motor brushes. Gently pull the brush assembly straight toward you and then upward to remove it.

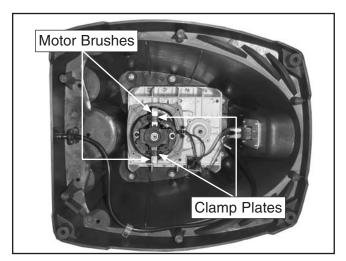


Figure 20. Motor brush location on motor.

- 5. Replace the motor brush assembly.
- Reconnect the wire to the motor brush.
- Tighten the clamp plate back in place, then repeat these steps to change the second motor brush assembly.
- **8.** Replace and tighten the base plate.

SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.

AWARNING Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

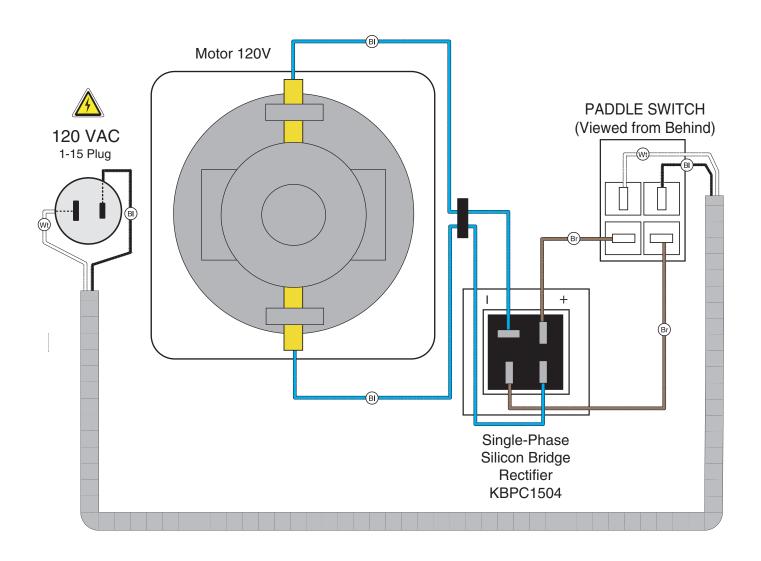
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE COLOR KEY YELLOW : BLACK **BLUE** LIGHT The photos and diagrams BLUE YELLOW included in this section are WHITE = BROWN = (Br) GREEN best viewed in color. You WHITE **GREEN GRAY PURPLE** can view these pages in TUR-QUOISE (Rd) ORANGE: (Or) **PINK** color at www.grizzly.com. RED

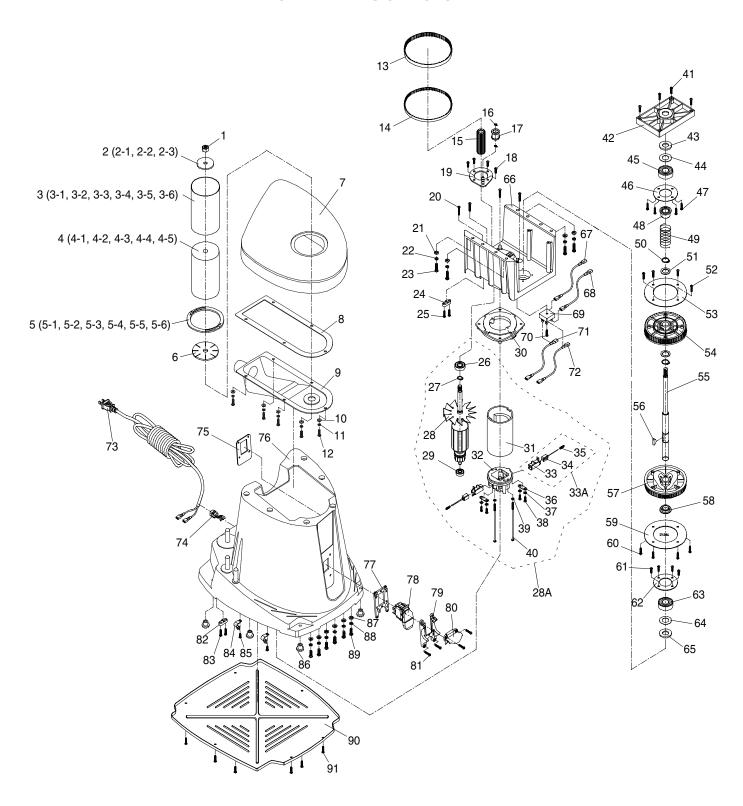


Wiring Diagram



SECTION 9: PARTS

Main Breakdown



Main Parts List

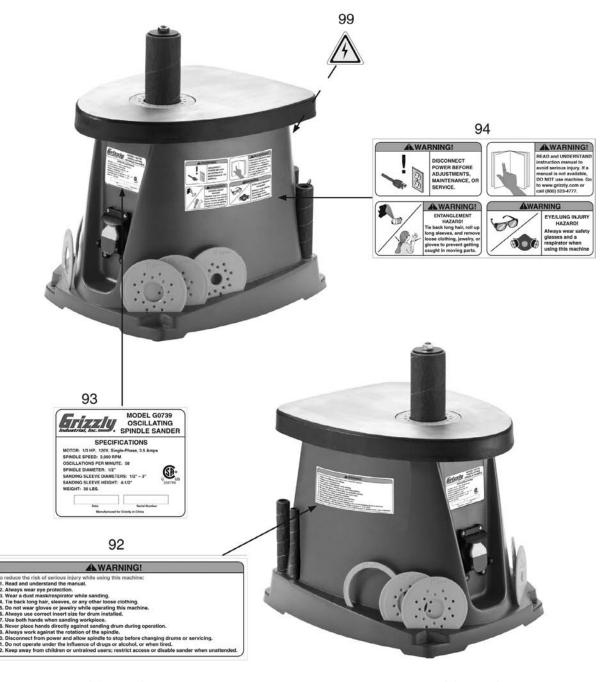
REF	PART #	DESCRIPTION

REF	PART #	DESCRIPTION
1	P0739001	SPINDLE HEX NUT M10-1.5
2	P0739002	SPINDLE WASHER SET OF 4
2-1	P0739002-1	SPINDLE WASHER 5/8" OD
2-2	P0739002-2	SPINDLE WASHER 7/8" OD
2-3	P0739002-3	SPINDLE WASHER 1-3/4" OD
3	P0739003	SANDING SLEEVE SET OF 6
3-1	P0739003-1	SANDING SLEEVE 1/2"
3-2	P0739003-2	SANDING SLEEVE 3/4"
3-3	P0739003-3	SANDING SLEEVE 1"
3-4	P0739003-4	SANDING SLEEVE 1-1/2"
3-4	P0739003-4	SANDING SLEEVE 1-1/2
3-6	P0739003-5	SANDING SLEEVE 2
4	P0739004	SANDING DRUM SET OF 5
4-1	P0739004-1	SANDING DRUM 3/4"
4-2	P0739004-2	SANDING DRUM 1"
4-3	P0739004-3	SANDING DRUM 1-1/2"
4-4	P0739004-4	SANDING DRUM 2"
4-5	P0739004-5	SANDING DRUM 3"
5	P0739005	TABLE INSERT SET OF 6
5-1	P0739005-1	TABLE INSERT 1/2" ID
5-2	P0739005-2	TABLE INSERT 3/4" ID
5-3	P0739005-3	TABLE INSERT 1" ID
5-4	P0739005-4	TABLE INSERT 1-1/2" ID
5-5	P0739005-5	TABLE INSERT 2" ID
5-6	P0739005-6	TABLE INSERT 3" ID
6	P0739006	BASE WASHER 2-3/4" OD
7	P0739007	CAST IRON TABLE
8	P0739008	GASKET
9	P0739009	DUST COVER
10	PW02M	FLAT WASHER 5MM
11	PLW01M	LOCK WASHER 5MM
12	PS08M	PHLP HD SCR M58 X 12
13	P0739013	TIMING BELT 3/8" X 160XL
14	P0739014	TIMING BELT 1/4" X 160XL
15	P0739015	DRIVE PULLEY
16	P0739016	TENSON ROLLER WASHER
17	P0739017	TENSION ROLLER ASSEMBLY
		TAP SCREW M4 X 14
18	PHTEK31M	
19	P0739019	ORIENTATION PLATE ASSEMBLY
20	PHTEK8M	TAP SCREW M4 X 20
21	PW03M	FLAT WASHER 6MM
22	PLW03M	LOCK WASHER 6MM
23	PS11M	PHLP HD SCR M6-1 X 16
24	P0739024	CORD CLAMP
25	PHTEK6M	TAP SCREW M4 X 16
26	P6001ZZ	BALL BEARING 6001ZZ
27	PR47M	EXT RETAINING RING 13MM
28A	P0739028A	PERMANENT MAGNET MOTOR ASSEMBLY
28	P0739028	ARMATURE ASSEMBLY
29	P608ZZ	BALL BEARING 608ZZ
30	P0739030	CONNECTION PLATE
31	P0739031	FIELD ASSEMBLY
32	P0739032	REAR COVER
33A	P0739033A	MOTOR BRUSH ASSEMBLY-1 PAIR
33	P0739033A	BRUSH HOLDER
34	P0739033A	CARBON BRUSH
35	P0739033A	BRUSH SPRING

RFF	PART #	DESCRIPTION
	1 / 111 #	DE00:::: ::0:1

NEF	PARI#	DESCRIPTION	
36	P0739036	CORD CLAMP	
37	PTLW11M	INT TOOTH WASHER 4MM	
38	PHTEK31M	TAP SCREW M4 X 14	
39	PW05M	FLAT WASHER 4MM	
40	P0739040	TAP SCREW M4 X110	
41	PHTEK8M	TAP SCREW M4 X 20	
42	P0739042	BEARING COVER	
43	P0739043	FELT WASHER	
44	P0739044	RUBBER WASHER	
45	P6203	BALL BEARING 6203ZZ	
46	P0739046	UPPER BEARING SUPPORT	
47	PHTEK6M	TAP SCREW M4 X 16	
48	P0739048	BEARING SLEEVE	
49	P0739049	COMPRESSION SPRING	
50	PR18M	EXT RETAINING RING 17MM	
51	P0739051	SPINDLE WASHER	
52	PHTEK31M	TAP SCREW M4 X 14	
53	P0739053	DRIVE GEAR PLATE	
54	P0739054	DRIVE GEAR	
55	P0739055	SPINDLE	
56	P0739056	WOODRUFF KEY	
57	P0739057	DIFFERENTIAL GEAR	
58	P0739058	BEARING SLEEVE	
59	P0739059	DIFFERENTIAL GEAR PLATE	
60	PHTEK31M	TAP SCREW M4 X 14	
61	PHTEK31M	TAP SCREW M4 X 14	
62	P0739062	LOWER BEARING SUPPORT	
63	P6203ZZ	BALL BEARING 6203ZZ	
64	P0739064	RUBBER WASHER	
65	P0739065	FELT WASHER	
66	P0739066	GEAR SUPPORT	
67	P0739067	WIRE ASSEMBLY 18G 1W 9"	
68	P0739067	WIRE ASSEMBLY 18G 1W 9"	
69	P0739069	RECTIFIER	
70	PHTEK8M	TAP SCREW M4 X 20	
71	P0739071	WIRE ASSEMBLY 18G 1W 6"	
72	P0739071	WIRE ASSEMBLY 18G 1W 6"	
73	P0739073	POWER CORD 18G 2W 6" 1-15	
74	P0739074	STRAIN RELIEF 6N-4	
75	P0739075	REAR SWITCH PLATE	
76	P0739076	HOUSING BASE	
77	P0739077	FRONT SWITCH PLATE	
78	G8988	SAFETY PADDLE SWITCH	
79	P0739079	SWITCH BRACKET	
80	P0739080	SWITCH BRACKET COVER	
81	PS56M	PHLP HD SCR M47 X 16	
82	P0739082	POWER CORD HOLDER	
83	PHTEK6M	TAP SCREW M4 X 16	
84	P0739084	CABLE HOLDER 18G	
85	PHTEK15M	TAP SCREW M4 X 10	
	P0739086	RUBBER FOOT	
86			
87	PW03M	FLAT WASHER 6MM	
88	PLW03M	LOCK WASHER 6MM	
89	PS11M	PHLP HD SCR M6-1 X 16	
90	P0739090	BOTTOM PLATE	
91	PHTEK31M	TAP SCREW M4 X 14	

Labels Breakdown



REF	PART #	DESCRIPTION
-----	--------	-------------

92	P0739092	WARNING LABEL
93	P0739093	ID LABEL

REF PART#	DESCRIPTION
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94	P0739094	MACHINE HAZARDS LABEL
99	PLABEL-14A	ELECTRICITY LABEL

AWARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

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3.	What is your annual househ \$20,000-\$29,000 \$50,000-\$59,000	old income?\$30,000-\$39,000\$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+
5.	How long have you been a v		ears20+ Years
6.	How many of your machines	s or tools are Grizzly? 3-56-9	10+
7.	Do you think your machine r	represents a good value?	YesNo
8.	Would you recommend Griz	zly Industrial to a friend?	YesNo
9.	Would you allow us to use y Note: We never use names	our name as a reference for Grizzl more than 3 times.	y customers in your area? _YesNo
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WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.



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